



Activities in Virgin Islands

ATSDR in Partnership with the Virgin Islands

The Agency for Toxic Substances and Disease Registry(ATSDR) is the lead public health agency responsible for implementing the health-related provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

ATSDR Site-Specific Activities

Public Health Assessment-Related Activities

One of the agency's important mandates is to conduct public health assessments of all National Priorities List (NPL) sites and of other sites where there might be a significant threat to the public health. In the **Virgin Islands** there have been **two** sites designated to the NPL.

A **public health assessment** (PHA) is a written evaluation of available data and information on the release of hazardous substances into the environment in a specific geographic area. It assesses the current or future impact of any such releases on public health. ATSDR, in conjunction with public health and environmental officials from the **Virgin Islands**, have conducted health assessments at the following **three** sites in the territory.

Site	Town/Sector	County/Municipal	Date
Island Chemical Corp.	Christiansted	St. Croix	5/19/1998
Bovoni Dump	St. Thomas	St. Thomas	1/9/1998
Tutu Wellfield	St. Thomas	St. Thomas	5/14/1996

A **health consultation** is a written or oral response from ATSDR to a specific request for information about health risks related to a specific site, chemical release, or hazardous material. It is a more limited response than a public health assessment. To date, **six** documented health consultations have been performed at the following **five** sites in the **Virgin Islands**. Dates in parentheses indicate additional health consultations conducted at a site.

Site	Town/Sector	County/Municipal	Date
Monroe and Sibilly Elementary School	St. Thomas	St. Thomas	5/01/2000
Bovoni Dump	St. Thomas	St. Thomas	12/23/1999
Anguilla Landfill/DPW	Christiansted	St. Croix	11/8/1999
Susannaberg Landfill	St. John	St. John	5/15/1992
Island Chemical Corp./VI Chemical Co.	Christiansted	St. Croix	7/6/1989 (5/25/1989)

Additionally, the following site-specific activities have been conducted by ATSDR in the **Virgin Islands**.

Monroe and Sibilly Elementary Schools - Congresswoman Donna Christian-Christensen of the **Virgin Islands** contacted ATSDR and requested an evaluation of drinking water cisterns that were contaminated with volatile organic compounds (VOCs) in the **Monroe and Sibilly Elementary Schools, Charlotte Amalie, St. Thomas**. ATSDR was asked to determine specifically: (1) whether the contamination found in the cisterns could be responsible for students at the schools experiencing upset stomachs and rashes, and (2) whether the contamination in the water came from the Tutu Wellfield site.

ATSDR completed a health consultation which addressed Congresswoman Christian-Christensen's request. In the health consultation, ATSDR concludes that there is no scientific evidence that the concentrations of VOCs or total trihalomethanes detected in the cisterns would cause either upset stomachs or rashes, and there are not any other risks of public health concern.

The health consultation, which will be released for public comment later this year, explains how ATSDR determined that the contaminated water found in the drinking water cisterns at the schools did not come from the Tutu Wellfield site. To assure that the drinking water at the schools does not contain any contamination at levels of concern in the future, ATSDR recommends that a monitoring program be instituted.

Tutu Wellfield - The Tutu Wellfield NPL site is located in the **Upper Turpentine Run Basin, Anna's Retreat, St. Thomas**. The entire basin is considered the site, with multiple sources and properties, and twenty-two wells which contain, at minimum, a trace of VOCs.

ATSDR conducted a PHA in May 1996 which concluded that the Tutu Wellfield site posed a public health hazard for past, present, and possible future ingestion of contaminated groundwater. Based on the site history, ATSDR estimated that some individuals may have been ingesting contaminated groundwater for 20 years (a worse-case scenario). An increased risk of cancer may exist for those individuals, as well as for individuals who are currently ingesting contaminated groundwater or those who may ingest it in the future. If individuals did not ingest contaminated water for more than 10 years, their chance of developing cancer would be significantly less. There is a strong likelihood that contaminated commercial and private wells have been, or may be, opened by individuals to supplement water supplies during water shortages. Also, wells that are not currently contaminated and wells that are constructed in the future, could potentially become contaminated from the groundwater plume.

A possible public health hazard exists for inhalation and dermal exposure to VOCs when contaminated groundwater is used for secondary purposes inside private homes (i.e., washing, showering, flushing, and bathing). The possibility also exists that these contaminated wells would be used for drinking water. Additionally, concentrations of contaminants in these wells could increase if a DNAPL enters the wells. The probability that adverse health effects could develop is greater with increased concentrations of contaminants. The recommendations from ATSDR's PHA include: (1) reducing and preventing exposure to contaminants, (2) implementing health follow-up and other activities, and (3) improving certain toxicological data gaps.

During ATSDR's activities at the Tutu Wellfield NPL site (1992-1996), two informal, one-on-one public availability sessions were held to learn about the public's site-related concerns. In addition, ATSDR attended the March 5, 1996, public meeting sponsored by the U.S. Environmental Protection Agency. During that meeting, ATSDR responded to questions regarding ATSDR's site-related activities.

EPA's proposed remedial action is that all wells be closed, and all soil and groundwater be treated to remove contaminants, within the site area. If implemented, the plan will eliminate on-going exposures and prevent potential future exposures to site-related contaminants, and therefore protect the health of the public in the area.

Toxicological Profiles

ATSDR develops toxicological profiles that describe health effects, environmental characteristics, and other information for substances found at NPL sites. These profiles describe pathways of human exposure and the behavior of toxic substances in environmental media such as air, soil, and water. In the past 4 years, several of these profiles have been supplied directly by ATSDR to requesters in Virgin Islands, including representatives of federal, territorial, and local health and environmental departments; academic institutions; private industries; and nonprofit organizations.

If you would like additional information, contact ATSDR toll-free at (888) 42ATSDR, that is, (888) 422-8737 or visit the homepage at <http://www.atsdr.cdc.gov>

September 2002



ATSDR

AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY